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Study Guides: Their Effect on Reading Comprehension in Content Areas in the Third Grade

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STUDY GUIDES: THEIR EFFECT ON READING COMPREHENSION IN CONTENT AREAS IN THE THIRD GRADE

by

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CHAPTER I

INTRODUCTION

The purpose of this study was to determine the effect of using study guides in content areas of the elementary curriculum on the general level of comprehension of third grade pupils in those content areas. It appeared from the search of the literature that study guides had been little used for lower elementary students. More frequent use has been with upper elementary and high school students. A study using third grade subjects seemed to be of value for at least two reasons: one, to fill the gap and two, to discover the benefits that might accrue, or to lend credence to the prevailing idea that study guides are more suitable for upper level students.

Social Studies in the third grade curriculum presents the most concentrated effort in content reading, and for this prime reason it was chosen as the area for this study. Also, the text being utilized has a story line which aided in making a more cohesive framework for the study guides.

This study attempted to answer the question: What is the effect of using a series of study guides based on a third grade Social Studies text on the general level of comprehension of one experimental class of third grade students over a nine-week period as compared with third grade students in two similarly grouped control classes?

RATIONALE

Children in the third grade are especially vulnerable to frustration when they are required to study a book which many of them have difficulty even reading. Though a less demanding task than studying, reading is by no means a simple task. Goodman and Niles (1970) describe reading as "a complex process by which a reader reconstructs to some degree, a message encoded by a writer in graphic language."

Many third graders are still struggling at the decoding level and have yet to experience meaningful measures of comprehension. Understanding the message requires skills far beyond decoding the graphics. Studying goes even farther in that additional skills are needed to meet the more advanced objectives.

The reading process involves the basic skills of sounding out or recognizing words, often referred to as phonics or decoding; and of using syntactic and semantic cues. Syntax deals with the structure of a sentence, and semantics with its meaning. Semantics (shades of meaning) begins at a literal level of understanding -- taking the page at "face value". A somewhat higher plane of comprehension is necessary at the inference level. Here the reader may be required to "read between the lines" in order to relate ideas or to offer explanations. At the critical level, a still higher plane of comprehension, the reader is required to evaluate the material. The highest level of comprehension, creative, results in some evidence of reaction to the reading.

It is within the framework of the higher levels of comprehension that new skills are needed to meet the still more advanced objectives for study. Simple recall, or even restating material in one's own words, are only beginnings to study skills. Meaningful study skills build through the analytical, critical, and creative levels of comprehension in which reasoned judgments and personal commitments are made.

The purpose for reading determines the rate at which material is read at speeds from fast for skimming to find isolated or specific information, to a moderate pace for relatively easy material in which recall of detail is not vital, to a slower and more methodical pace for studying. Purpose for reading also has the potential for opening new doors and expanding curiosity. It is the means for sharing in a world of feeling and knowledge, and of preparing the reader to make his or her own contribution to that world in time. In the third grade the child is first facing these new vistas. The fledgling "is making the shift from learning to read to reading to learn" (Karlin, 1975). The process of reading begins to take on a new and awesome dimension.

A major goal of education is to develop the fledgling into an independent learner. The assumption is made that instructional materials and methods can be so arranged as to increase efficient and effective learning (Dale in Karlin, 1975, p. 19; and Rothkopf, 1965). If the student is to <u>read to learn</u>, the instructional materials and methods in the <u>content</u> area must rely heavily on reading activities supported by the other communication skills of

listening, speaking, and writing.

Based on the psychology of learning (Gagne, 1965, pp. 20-21; Bruner, 1966, pp. 308-309) these activities need to begin at the pupil's level of understanding and build sequentially on newly gained skills. The number and variety of skills involved in the process of studying would dictate a convenient organizational format based on the content.

One might ask why reading in the content area should require different skills from those learned in the reading class. Most, if not all, of the specific reading skills are used in content reading, but they do need to be taught in the new context (Karlin, 1975, p. 21). These include such skills as determining details, understanding sequence, recognizing the main idea, identifying cause and effect, making contrasts and comparisons, predicting, and forming conclusions, on both the literal and inferential levels of comprehension. Further skills include locating information within the reading, stating the author's purpose, summarizing, making generalizations, and following directions.

Content reading also requires skills to deal with special features. In Social Studies, for example, pupils need the ability to read maps, graphs, charts, and diagrams. They need to know how to use the table of contents, the index, the appendix, and how to locate information in other sources including reference material such as encyclopedias. They need the skills of outlining and note-taking, and of knowing how to adjust their reading styles to locate, select, and organize material (Karlin, 1975).

Reading in the content area poses a special problem in the lower elementary grades. Schools rarely assign more than one level of a textbook for each of the content subjects. The problem becomes evident when the heterogeneously grouped children in a given grade cannot handle class assignments based on that one text. Thus, the teacher must provide alternative strategies for meeting the objectives. Yet, reading the text itself is a viable objective. It follows, then, that these strategies point to an activity and/or instrument that can be used to bridge the gap allowing a measure of success to the low readers, while teaching and promoting good study skills for the benefit of all. A heterogeneous class will possess varying communication skills that can be tapped and shared to mutual advantage. A study guide format might then become feasible using the better readers in peer group situations.

The process of studying goes far beyond getting the right answer. It involves not only knowing how to get the right answer, but also knowing what to do to retain it. The systematic use of study guides may also be a practical approach to teaching the pupil that study means keeping attention focused on the task (Rothkopf, 1965; Allington, 1975).

The rationale for using study guides, thus far, is seen from the teacher's point of view. It would seem that, lacking some motivating features, the best-intentioned form for teaching would become only more "purple ditto". From the pupil's point of view, some related activities need to be done either alone, or with a

peer or parent. These activities add interest and enhance the learning. The level of interest is vital and needs periodic monitoring to maintain a positive climate for the duration of the project.

CHAPTER II

PROLOGUE TO THE REVIEW OF THE LITERATURE

Out of the pros and cons that abound in educational philosophies and research, the attempt has been made to present a case for structuring study guides as a method of facilitating the comprehension of textual material.

The major thrust is to develop independent learners. It takes both material and motivation to effect the outcome. The teacher needs to be aware of the philosophies of how children learn in order to prepare the learning set. At the same time, the teacher needs an understanding of the problems within the set and those brought by the children to the set. Inadequate and inappropriate materials supplied, together with "defective" and "deficient" readers add up to a challenge. (For a discussion of "defective" and "deficient" types, refer to the subsection Reader problems.) Necessary adjustments must be made to accomplish the major objective. Taba (1973) joined other educators in saying ". . . the proper business of school is to teach students how to think."

A second section presents some of the many ways in which study guides may be constructed and a final section emphasizes the importance of pupil reaction, motivation, and interest.

REVIEW OF RELATED LITERATURE

Independent vs. independent learner

The Back to the Basics movement in education is fast becoming a national concern. Many states have either passed legislation for competency-based education or have bills pending. The legislation is aimed at making provision to equip high school graduates with at least the minimum competencies needed to function in society. The basic goals, or "survival skills", include enabling students to be wise shoppers; to budget; to balance a bank book; to read the paper, a map, and a transportation schedule; and to follow directions in filling out a form.

Yet, Ausubel (1968) refuted social utility as a viable goal. "Even if it were possible to prepare students for 'real-life situations, this is not the goal or function of education" (p. 164). He emphasized that the object of learning is to increase the cognitive structure. Dale's statement (cited in Karlin, 1975) concerning the object of education is more inclusive; "The goal of all learning is to develop the independent learner" (p. 19).

Social utility prepares the individual to be independent, with no further explicit goals. Preparing the individual to be an independent learner, on the other hand, implies far-reaching goals. Based on general educational theory, different goals require different teaching strategies. Dale observed this distinction in looking forward to the use of "instructional materials

and methods that will increase independent learning" (cited in Karlin, 1975, p. 19).

Meaningful learning

Children seem to have a natural inclination toward independent learning. Piaget (1950) noted that "however dependent he may be on surrounding intellectual influences, the young child assimilates them in his own way" (p. 160). Ausubel (1963, pp. 52-53) referred to this assimilated knowledge as a "cognitive structure" the growth of which depends on the learner tuning in to what is meaningful. To be meaningful, the new material must relate in some way to the existing cognitive structure. It either adds new information to a known subject, or it links two or more known subjects under one heading. Some meaningful learning, however, simply fits in to broaden an already present background. From birth and through the pre-school years, children have been fashioning a cognitive structure without the benefit of formal teaching. Their development of oral language is an example of one major accomplishment.

Structure in formal teaching

Johnson (1973) stressed the importance of structure in the formal teaching of skills. One cannot expect a child "to do things he has not yet learned to do." At the same time, the child needs to learn to be independent. Guidance in successfully completing a task is essential to avoid errors in learning. This

support be gradually lessened and finally removed as independence is gained. Gagne (1965) also referred to "prior capabilities that are of crucial importance . . . in determining the conditions required for subsequent learning" (pp. 20-21).

Sequencing of skills again appeared in Ausubel's (1963) three-step outline for effective teaching:

a) Match material to the learner's existing level of readiness.

b) Insist on mastery and consolidation as prerequisites for success in future learning.

c) Provide a sequential organization of learning tasks.

Bruner's (1964) four-step outline for effective teaching likewise included the necessity for sequencing of skills:

1) Determine what experiences and attitudes are needed to create a "predisposition toward learning" (pp. 308-309).

2) Assess, in relation to the learner, the instructional material. It must be understandable; it must have the potential to generate new ideas; and it must enhance the usability of existing knowledge.

3) Sequence the skills.

4) Make provision for both extrinsic and intrinsic rewards. Adapt the spacing of the rewards to be given either immediately or deferred, as conditions and objectives dictate.

Each of the foregoing authors (Johnson, 1973; Gagne, 1964; Ausubel, 1963; and Bruner, 1964) singled out the necessity for sequencing skills. Johnson advocated the need to analyze skills before they are taught, to ascertain the prior introduction of

"interlocking" skills. Ausubel (1968, p. 128) explained that the best way to increase the cognitive structure is by carefully choosing and arranging the "substantive" content in such a way as to relate to the existing cognitive structure and by wisely "programming" the material.

Matching material to the reader

The programming of material and skills for the development of comprehension in reading is dependent on the learner's experiential background and oral facility (Johnson, 1973). In their outlines above, both Ausubel and Bruner made provision for matching the instructional material to the learner's existing level of readiness. Readability level, the difficulty level of the material, and reader level, the present ability of the learner, must match.

Reader level can be assessed by noting the results of previous test records, by anecdotal entries in the student's cumulative file, and by a variety of standardized or informal reading tests. Readability levels are most often checked using any one of several readability formulae or charts. The factors usually considered include length of the sentences and difficulty of the words as determined by the number of syllables.

Hansell (1976) warned against too much reliance on the levels indicated by these scales. They give approximations and relative ranges only, and need to be used judiciously. He cited both Rudolf Flesch (1962) and Jeanne Chall (1958) in advising

caution in the application of their formulae. Nelson (1978) offered an explanation as to why matching reading level to the readability level of the material does not assure a frustration-free situation. The author reasoned that there are "too many factors other than sentence length and word difficulty involved in comprehending content." Linguistic style, abstract and complex concepts, and special vocabulary are significant difficulty factors.

Following a discussion of the cloze procedure as a measure of readability and comprehension, some of these difficulty factors which stem from content readability and from within the reader will be examined.

Readability level using the cloze test

The cloze test may serve to measure, at once, both readability and comprehension. Bormuth (1973) described the cloze test as much like the conventional fill-in test except that, by deleting every fifth word, functional as well as concept words are needed to fill in the blanks. Consequently, the task of completion is also a measure of comprehension by having to reconstruct full sentences instead of supplying single concept words. A cloze test is a versatile instrument in that it is easy to construct, to administer, and to score, in addition to its having the ability to measure comprehension.

Bormuth (1968) has done extensive research on the cloze test to determine comprehension levels based on raw scores. His findings

suggest that an instructional level is determined by a score of at least 44%. Based on the usual number of 50 items in a cloze test, 22 correct answers would be considered suitable for teaching purposes. A lower score, 21 or less correct answers out of 50 items, would indicate a frustrational level, one at which the student would experience little or no success because the material would be too difficult to read. An independent level would be determined by a minimum score of 57%, 29 or more correct answers of the 50 items. This material would be considered too easy for instruction in that it would afford no challenge to the student. Thus, a score falling between the limits of 44% and 57% might be said to effect a match between the reader and the material.

The results of cloze scores have shown significant correlations with other tests of comprehension. Bormuth (1973) found correlations ranging from .90 to .95 between cloze and the vocabulary sections of the four forms of the Gray Oral Reading Paragraphs. Correlations ranged from .91 to .96 on the comprehension sections of the same tests.

Problems in readability in content material

Bormuth (1968) used narrative material in arriving at the instructional and independent levels indicated above. Cohen (1975) reported a study done on the cloze test as a measure of performance using content as opposed to narrative material. The content material was drawn from literature, social studies and science textbooks. In contrast to the scores on narrative material, the

content scores appeared to set lower limits for readability, an indication of greater difficulty. Mean scores showed literature as the most difficult at 30.52%. Social studies was listed as the easiest at 39.62%, and science fell between at 36.99%. In reviewing this study, Cohen pointed out that reabability levels in content materials tend to be deceptive. Some passages seem "easier" than others even though readability levels appear the same according to the readings yielded by any of the commonly used methods such as the Dale-Chall readability formula.

Chall (1973) elaborated on the problems in readability, tying them in with Bernstein's theory of "codes". Some comprehension problems originate with the language structure which students are accustomed to outside of school. In Bernstein's theory the term "codes" describes the patterns of communication used in the home environment. The language is simple in some backgrounds, but adequate for the listener to comprehend. In other backgrounds the language is more complex, which accustoms the listener to engage in a richer, or more varied pattern of communication.

Continuing the discussion, Chall reviewed the implications of Bernstein's theory of "codes". By the fourth grade the readability level of the content material becomes more complex. It is then that those children from a restricted language background fall even further behind than their classmates from a more advantaged background. The problem becomes more acute for children with a non-standard dialect who often have difficulty with phoneme-grapheme correspondence, as well. A combination of this and the demands of comprehending more sophisticated language makes

reading a task beyond their ability. Spache (1973) advocated that the teaching of comprehension skills begin as early as the first grade to mediate the difficulties that almost surely lie ahead for the poor comprehenders.

Reader problems

Four groups of children with problems were identified by Cromer (1970). The "deficit" and "difference" groups are those children with reading problems. The "defect" and "disruption" groups are children experiencing physical and emotional problems. It is the "deficit" and "difference" groups that will be the focus of this discussion.

The "deficit" poor readers lack both decoding and vocabulary skills with resulting loss in comprehension because of this inability to sound out the graphemic symbols and to recognize basic sight words. The "difference" poor readers are those who lack no decoding or vocabulary skills, but who nonetheless have trouble with comprehension. Cromer's studies (1968, 1970) were conducted to determine what effect there would be on comprehension if sentences were pre-organized into meaningful groups of words. Results of these studies showed a marked improvement in comprehension for the "difference" groups. The exercises had no effect on the comprehension levels of the "deficit" groups. Based on these findings, one might assume that the "deficit" group might best be served by first concentrating work on decoding and vocabulary skills.

The results of a later, more comprehensive study (Oakan, Wiener, and Cromer, 1971) discouraged teaching decoding and vocabulary skills in isolation. To do so interferes with the process of organizing words into meaningful units, an ability that appears to be significantly related to good reading comprehension. In the study, poor readers whose comprehension level was at least 1-1/2 years below grade, were not significantly helped by "knowing" or by being able to identify all the words. Flash cards were used in the training sessions, and the more difficult words were also used in sentences in an effort to heighten understanding. In view of these findings, it was recommended that the three skills--decoding, vocabulary, and organization--be integrated into an overall teaching strategy.

Other results from this study by Oakan, Wiener, and Cromer, showed that good and poor readers did comparably well in the good auditory input tapes. "Good" in this reference meant readings that were acceptably phrased, pronounced and with almost no errors. Visual material was made by duplicating all the actual hesitations, mispronunciations, and repetitions, of a poor reader. Good readers, whose comprehension was on or above grade level, showed lower scores when tested on the poor visual material. One unexpected finding was that good readers performed better on the visual material than they did on either the good or poor auditory input, probably because of their individual ability to structure the visual material into a pattern for comprehension. This study supported the results of earlier research by Cromer (1970) in which it was suggested that "beginning readers" might be printed

in pre-established and meaningful word groupings to aid in comprehension.

Study guides as an alternative solution

In the absence of such pre-printed material, teacher-made guides based on the test could be substituted. Pre-phrasing is only one of many skills needed for comprehension. Other reading skills could also be adapted to this format, one which fits the definition of a study guide as provided by Tutolo (1977):

> A study guide is a teaching aid written by the teacher to be used by the student to assist the student in developing reading skills for the purpose of enhancing comprehension of textual material.

Use of the study guide format has yielded favorable results. Cunningham (1975) reported that the model for guidance led to comprehension without the guide, and that it helped students overcome frustration. Used regularly, a study guide may also have some potential for increasing learning. According to one study (Howe and Colley, 1976), familiarity with a task or testing format lent favorable influence to learning. These findings would have strong implications for the structuring of study guides.

How to help the "deficit" readers

The question still remains as to the specific problem of the "deficit" readers. If they cannot read well enough to handle a study guide, how is it going to help them?

One answer may be found in a program developed in Hillsboro County, Florida (Bullerman and Franco, 1975) for inservice training for teaching reading in the content areas. It suggested grouping children in pods of four or five comprised of one or two "top" students; two "average" students; one "below average" student, and one "poor" student. This encourages children to help each other and gives the less able children a feeling of accomplishment in completing a task.

The listening station, using teacher-recorded tapes to accompany the study guides, is another answer to the problem. Oaken, et al (1971) found that good and poor readers did equally well in tests using the "good" auditory input material, as previously discussed.

Help for the "deficit" reader is available from still other sources. The volunteer tutor program lends itself readily to this guided format, and parents can be of valuable assistance in helping their children to complete the study guides assigned as homework. Help is also available from the classroom teacher in small group or one-to-one settings.

SKILLS DEVELOPMENT THROUGH THE USE OF STUDY GUIDES

Study guides provide an instrument for dealing with most, if not all, the special skills required to heighten the comprehension of a lesson. The subtitles that follow from Outlines to Study Skills suggest some of the techniques adaptable to the study guide format.

Outlines

One use of the study guide might be to acquire an understanding of a story. Guthrie (1977) suggested that completing the framework of an outline might be an alternative way of leading students to comprehension, instead of always asking for the main idea. In this format, the Roman numerals would stand for setting, theme, plot, and resolution, with perhaps episodes A and B under the plot. "Comprehension does not evolve around a main idea" (Guthrie, 1977).

Organizational Questions

Herber (1970) suggested another use for study guides. The strategy begins with developing the background and setting a purpose for reading the assignment. The students then silently read and study the given text with the aid of a study guide. Open discussion and assessment complete the sequence. This type of study guide helps the student to organize the material by the use of meaningful questions. It may highlight important information, or prompt the student into relating ideas. It may also attempt to clarify special content words found in the lesson.

Study skills can be divided into three categories which represent reading skills on three levels of difficulty (Herber, 1973). The receptive level deals with getting the meaning from the printed page. The reflective level calls for cognition, a thought response to "interpret" the meaning, and the expressive level requires the student to report on the reading.

In spite of the study guide's organizational format, Allington (1975) pointed out that there is little help for the "difference" poor reader, and no help for the "deficit" poor reader that Cromer (1968) had identified. To be of value, study guides must be designed to meet the needs of the students.

As if in response to this observation, some help does seem to be available to the "difference" reader. Good and poor comprehenders in the fifth grade were the subjects in research conducted by Rickards and Hatcher (1977-78). The poor comprehenders were like Cromer's Difference Model. The study was concerned with what effect interspersed meaningful learning questions as semantic cues had on these poor comprehenders. The results showed a marked improvement in their comprehension, as opposed to no gains for the good readers, when content material was interspersed with meaningful learning post questions. The questions did for these poor comprehenders what they were unable to do for themselves. It was suggested that practice with this format might assist poor readers to become independent in the techniques of structuring and organizing. Ausubel (1968, p. 100) also advocated the use of "adjunct" questions as a means of organizing the reader's cognitive structure.

The cause and effect skill

Herber and Nelson (1975) advised caution in the use of questions. They asked, "How is it possible to teach a skill by questioning when they (the students) need that skill they lack to accomplish the task?" For instance, in teaching the skill of cause

and effect, the student does not yet know how to tell which is which. It would make little sense, then, to ask the student which is the cause and which the effect. The skill must first be taught. In the same report, Herber and Nelson offer a detailed strategy designed to teach this comprehension skill. The sequence guides the students carefully through a series of steps leading from dependence to independence. It begins with such help as referring the student to the page, paragraph, and line to find the answer. It ends with the students formulating questions and making generalizations.

Complex sentences

Reading comprehension may also be developed through writing. Combs (1975) researched the possibility of improving reading comprehension by having children combine sentences. An example of the exercise follows:

Cue: He saw the wolf.
The wolf was shiny and gray.
The wolf jumped across the brook.

Child's response: He saw the shiny, gray wolf who jumped across the brook.

Of special interest are the results of this study. The reading comprehension of these children showed no gains as measured by the Gates-MacGinitie Reading Test (1964). However, they showed significantly higher gains over the control group ($p < .001$) as measured by an adapted test.

In a review of this research, Graves (1977) questioned whether the fault lies with an "insensitivity" of the standardized

test to measure the specific gains in reading comprehension which Combs had reported using the adapted test. Other researchers (Tuinman, 1973-74; and Cromer, 1968) also express doubts as to the validity of standardized tests in measuring comprehension.

Context clues

Another reading comprehension skill may be developed through the use of context clues (Emans, 1973). This skill parallels the process required to complete a cloze passage, except that "crutches" are used. This strategy not only helps to discourage wild guessing, but also gives the necessary assistance in learning how to discover the right word. Emans found that these clues fell into a pattern with the most assistance being given at the beginning of the series of exercises. The easiest to hardest patterns follow:

1. only consonants given
2. choice of one of four words
3. first and last letter given
4. length of word given
5. beginning letter given
6. no clue given

Cloze training

Kennedy and Weener (1973) conducted a study to determine the usefulness of training students in the cloze procedure. Third grade poor comprehenders were trained in sessions totalling 1-2/3 hours in both visual and auditory cloze procedure skills. The visually trained children did show significant gains over the control group in comprehension. Though the training sessions were

individualized, the researchers felt confident that the program could be effectively used in group situations to enhance the comprehension of poor readers. A significant factor in the final evaluation was that the cloze post test was constructed from a higher reading level than the instructional level of the training material. In a review, Golinkoff (1975-76) acknowledges the plausibility of improving poor comprehension by using cloze procedure training.

Vocabulary

To further emphasize the versatility of the study guide, another suggestion was offered by Burmeister (1976). Directions were given for developing vocabulary through morphemes. These directions are adaptable to any lesson. Free morphemes are words that can stand alone, such as elephant and hippopotamus. Bound morphemes relate to suffixes, prefixes, and elements of words that carry meaning but which cannot stand alone. Examples of bound morphemes are: un, ly, ing, geo, and graphy. Based on bound morphemes found in the assignment, a multiple choice pretest could be included in the study guide. Children would be directed to first complete the pretest and then correct it using the text. A discussion following this activity could further establish understanding. Burmeister also included suggestions for games and other activities, such as making a mobile using one root word or an affix as the theme. Morpheme families could also be developed in any of the art media. Activities such as these enhance the use of the study guide by lending variety and

maintaining interest.

Study skills

Mattleman and Blake (1977) listed numerous study skill activities using various sections of the newspaper, maps, telephone directories, a menu, and even the Guinness Book of World Records as the source material. Study skills to be learned include: skimming; selecting and organizing material; locating information; following directions; using a directory; and reading a map. Many of the activities suggested would make practical homework assignments in that parents could become involved in their children's learning.

ACTIVITIES, MOTIVATION, AND INTEREST

Activities to "acquire" and activities to "react"

Herman (1976) noted that learning activities should be geared to the three major objectives: acquiring knowledge, gaining skills, and demonstrating appreciation. Roughly divided, they become activities to "acquire" and activities to "react". Normally, creative projects should follow the lesson because there needs to be a background for the development of related ideas. Creativity, thus, is a reaction to what is learned. The creative act also does much to enhance the quality of learning. Those activities designed to help children acquire knowledge and sharpen skills are also pedagogically sound in that the learner is actively involved in the learning process.

Providing motivation

Duffy (1973), Thomas (1978), and Hansell (1976) are among the many proponents for the use of the Directed Inquiry Activity as a motivational device. DIA is based on a framework of the six question starters: who, what, when, where, why, and how. The students survey the assignment to ask questions and make predictions based on titles, subtitles, and pictures or diagrams. The teacher records these on the board, while providing verbal feedback to shape their thinking skills. Interrelationships are traced across categories to provide more organization.

This initial phase sets a purpose for reading and "helps to fix an anticipatory mind set toward the forthcoming reading experience" (Hansell, 1976). Following the reading, students compare and correct their findings. Involving the students from the outset increases interest and gives them a feeling of confidence.

Maintaining interest

The ingenuity and creativity of the teacher in preparing study guides has a bearing on their success in maintaining interest. Potter (1978) gave several examples of well-planned and creative study guides which have been successfully used in the classroom. An activity prepared to introduce a book personifies its title, and all the questions are framed in the first person, giving the child the feeling of communicating with a new-found friend. Other study guide examples demonstrate the variety of activities that can be culled from a single lesson in the content area.

In evaluating her experience with this medium, Potter felt justified in preparing the study guides, for the most part, at a literal level of comprehension because of the affective gains. Her seventh grade students, working below the fourth grade reading levels, had previously experienced not much else but failure. This report underwrites the importance of starting instruction at the reader's level.

Ausubel (1963) promotes interest as a major factor in effecting long-term learning. Interest has a cause-effect relationship with "cognitive drive" -- learning for learning's sake -- in that the more one learns the more one wants to know. Success in learning tasks bears its own immediate reward. Such intrinsic motivation has the advantage of carryover beyond any external pressure for achieving.

A psychological factor in maintaining interest is curiosity (Berlyne, 1965). Elements of curiosity, such as surprise, doubt, perplexity, bafflement, and contradiction, set up the impetus to be satisfied. This process, which Berlyne calls "epistemic behavior", results in the acquisition of knowledge.

Herman (1976) conducted a study to discover the reasons why some classrooms are characterized by a high level of interest in contrast to a prevailing boredom in others. Social studies classes were selected for the research on the basis of the results from a student survey. The final report, though not surprising, underscored the importance of an optimum teaching/learning environment. Those classes that were teacher-centered,

textbook dominated, and seat-bound led to boredom. Classes in which objectives were carefully planned together with a variety of high-interest activities; where help was given to develop study skills; and where provisions were made for the range of reading levels, were the high interest classes.

SUMMARY

The purpose for using study guides is to help children achieve independence in learning. This can best be accomplished by assessing their capabilities and by providing appropriate learning materials, together with teaching strategies designed to promote the thought processes. Activities abound to teach the many content reading skills. It is left to the ingenuity of the teacher to adapt these to fit the need.

Of the content area subjects, Social Studies seems to be well-suited to this format because it offers expanding horizons to third graders. If children can once be "turned on" to learning in a relatively frustration-free environment and achieve their first success, there is a promise of hope for progress.

One final observation comes from Vacca (1977). Structuring (as in designing study guides) may have an important side effect in that it can also help to clarify the teacher's direction and strategies.

CHAPTER III

METHODS

Population

This research was conducted at an elementary school serving grades 1-5 in the Duval County Public School System. The student population of approximately 650 is integrated, with students being bused from a predominantly black neighborhood across the St. Johns River. Very few nationalities other than black and white were represented, with the exception of a small sprinkling of Orientals.

The school is located in pleasant surroundings on attractively landscaped grounds covering 13.2 acres. It serves the immediate neighborhood of low to middle income homes and a trailer park. Other children are bused in from a middle to upper-middle income neighborhood.

Results from the most recent Stanford Achievement Test scores placed this school at the 59.90th %ile as compared with the county average of 54.93 %ile. These figures represented a composite of the reading and math scores for grades 1-5.

Initially, class size of approximately 25-30 students was racially balanced according to the total number of black and white students in each grade level. Sex and ability were also considered in the distribution of students so that each class on a grade level was presumably as nearly randomly grouped as the next. However, changes in this balance occurred as new students entering

the first week of school were assigned to replace the no-shows. The criteria for assigning new students gave racial balance first consideration, followed by class load.

Materials and design

Materials for this research were teacher-made and were based on the third grade Social Studies textbook, Our Towns and Cities, published by Ginn and Company. The materials consisted of two cloze tests and 24 study guides.

The cloze tests were constructed by deleting every fifth word. The 50-item pretest was made from a passage near the front of the test, and the 54-item post test used a section in Unit 4 near the middle of the book.

The study guides were made to coincide with the first nine-weeks lesson plans covering Units 1 and 2 in the text. Each study guide covered approximately one to two pages depending on the concepts to be attained, and were structured following the context clues format and sequence suggested by Emans (1973). Beginning with the easiest form in which most help is given, and working up to the hardest in which no clue is given, they are:

1. only consonants given
2. choice of one of four words
3. first and last letter given
4. length of word given
5. beginning letter given
6. no clue given

(See Appendix for copies of the tests and study guides.)

Three methods were used for completing the study guides: in a group; with a buddy; or as homework. Groups averaged five in number with at least one top reader, two low readers, and two or three average readers filling out each group. Standings on the pretest were used as the basis for assigning the students into their respective groups. Consideration was then given to group compatibility, with every effort being made to keep the groups in the balance as suggested by Bullerman and Franco (1975). Only the Experimental class used the study guides. The two Control classes were taught by the conventional method.

Administration of tests

The pretest was administered during the first week of school to the Experimental class and the two Control classes. The post test was given to the same three classes during the first week of November, approximately nine weeks later. The children were urged to do their very best and to try to fill in every blank. No time limits were set in that these were to be power tests.

Most subjects finished the pretest in less than 45 minutes. Those few who did not finish, turned in their papers in various stages of completion, having done all they could. The post test took about an hour to complete. Those papers that were handed in with incomplete blanks were given back for completion to the subjects in all three classes in order to have a more accurate picture. It was felt that in one of the Control groups, at least, adequate time had not been allowed for the proper completion of the test. As in the pretest, only a few post tests were not fully

completed due to inability or frustration.

Scoring

The criteria for scoring was liberal to avoid too many zero scores. Answers were surveyed and acceptable words were listed for each blank. For example, words allowed for the blank in the following sentence were get, got, drive, drove, in addition to go, which was the exact word from the text:

"It's time we _____ into San Francisco."

All of the words selected had to make good sense in the context. Some allowance was also made for the incorrect subject/verb correspondence associated with black dialect.

Two more reasons for not adhering to the exact-word criterion are worth mentioning. First, the textbook has attempted to select words and sentence structure appropriate for the third grade. In doing so, some of the passages are apt to differ from the normal flow of language that children are accustomed to. The second reason is that the vocabulary of third graders is limited, and they are not generally aware of the many choices they might have of a given word. Thus, they are forced to use the only word they know that would make sense in the sentence.

CHAPTER IV

RESULTS

Only those subjects who were present for both the pre and the post tests were considered in the final analysis of scores. Class loads averaged from 26 to 29 during the course of the experimental period, but entries and withdrawals lowered the reported number of subjects in each group to less than 20.

Table 1 lists the pre and post test scores for the Experimental group and for the two Control groups, C_1 and C_2.

Experimental				Control$_1$				Control$_2$			
Pre		Post	Gain/ Loss	Pre		Post	Gain/ Loss	Pre		Post	Gain/ Loss
1	A	5	+ 4	3	A	10	+ 7	1	A	2	+ 1
1	B	9	+ 8	6	B	15	+ 9	3	B	0	- 3
1	C	3	+ 2	7	C	2	- 5	4	C	5	+ 1
2	D	14	+12	9	D	15	+ 6	9	D	12	+ 3
4	E	6	+ 2	10	E	10	0	15	E	16	+ 1
4	F	20	+16	10	F	25	+15	19	F	9	-10
6	G	16	+10	12	G	15	+ 3	25	G	21	- 4
7	H	22	+15	24	H	23	- 1	27	H	31	+ 4
12	I	19	+ 7	26	I	21	- 5	28	I	20	- 8
13	J	27	+14	26	J	22	- 4	28	J	27	- 1
14	K	17	+ 3	27	K	28	+ 1	30	K	19	-11
16	L	20	+ 4	29	L	35	+ 6	30	L	31	+ 1
18	M	36	+18	30	M	34	+ 4	32	M	25	- 7
25	N	31	+ 6	31	N	37	+ 6	32	N	34	+ 2
26	O	29	+ 3	34	O	23	-11	32	O	29	- 3
28	P	39	+11	35	P	25	-10	33	P	28	- 5
36	Q	37	+ 1	36	Q	41	+ 5	33	Q	30	- 3
37	R	44	+ 7	355		381		35	R	21	-14
251		394						38	S	23	-15
								454		383	
E = n18				C_1 = n17				C_2 = n19			

Table 1

A range of 36, 33, and 37, respectively, sets comparable limits for the three groups in the pretest. Ranges of 41, 31, and 21, respectively, show a marked difference for the three groups in the post test. The Experimental group and C_1 group compare favorably with respect to the top scores of 44 and 41 in the post test.

Table 2 compares the medians and the means for all three groups on both the pre and the post tests. The pretest median scores for the two control classes tend to indicate a similarity in class make-up with C_1 at 26, and C_2 at 28. The $\bar{X}$ pretest scores for the two classes, 20.88 and 23.89, respectively, lend support to this balance. By comparison, the pretest median score, 12.5, for the Experimental group and the $\bar{X}$ of 13.94 would indicate a class much lower in reading comprehension.

Medians and Means						
	Experimental		C_1 group		C_2 group	
	Median	$\bar{X}$	Median	$\bar{X}$	Median	$\bar{X}$
Pre	12.5	13.94	26	20.88	28	23.89
Post	20.0	21.89	23	22.41	21	20.16

Table 2

Figure 1 plots the coordinates for each Median and $\bar{X}$ pair from the pre to the post test results. A post experiment analysis of the prior year's reading records supported the initial class standings.

Figure 1

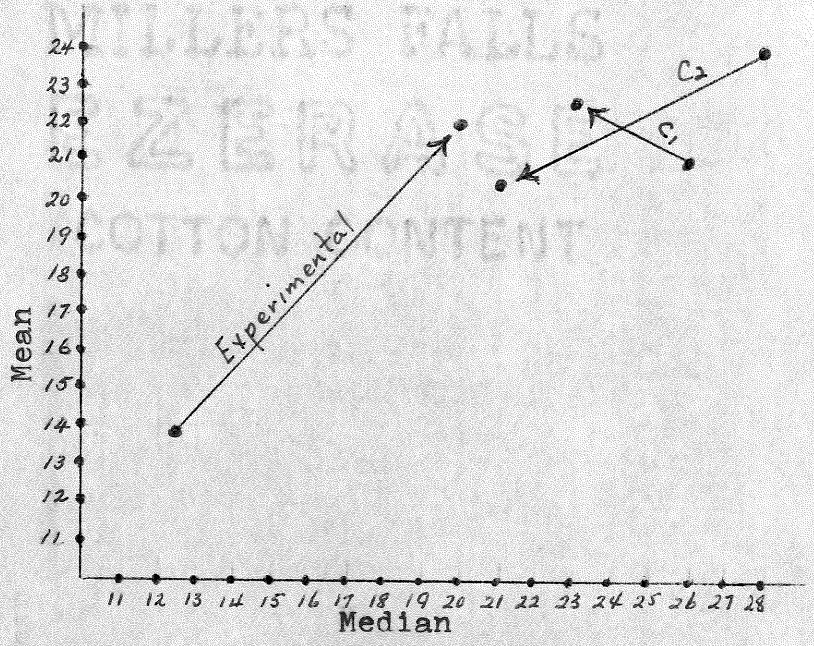

Table 3 shows the $\bar{X}$ gain scores of the three groups. The Experimental group made an average gain of 7.94 words on the post test. The $Control_1$ group made an average gain of 1.53 words, while the $Control_2$ group lost an average of 3.74 words on the post test performance.

	Gain Scores	
	n	$\bar{X}$
E	18	7.94
C_1	17	1.53
C_2	19	-3.74

Table 3

The analysis of variance results are presented in Table 4. The findings of ANOVA were as expected in view of the differences in the gain scores.

Table 4

Analysis of Variance

Source of Variation	Sum of Squares		df	Mean Square	F
Between	1263.28	(K - 1)	2	631.64	17.61
Within	1828.86	(N - K)	51	35.86	
Total	3092.14	(N - 1	53		

To reject H_o: No difference between groups:

Test F = 17.61 with df = (2, 51) $F(2, 51, .05) < 3.23$

F must be greater than 3.23 in order to reject H_o.

Therefore, H_o is rejected.

The Scheffé test was utilized to locate mean differences. In each case the F ratio was great enough so that the difference between the mean of the E group and C_1 group, difference between the mean of the E group and C_2 group, and the difference between the mean of C_1 group and C_2 group are all significant.

The difference between each of the means was greater than can be attributable to sampling error of more than 5% of the time.

Conclusion

From the results of the data, there is strong evidence that the three groups had different gains. Consequently, it would appear that the study guide format may be a successful method for increasing reading comprehension in the content area.

CHAPTER V

Implications for further study

The possibility of extending this research has been discussed with the present third grade teachers. All seem in favor of using the study guides during the first nine-week period of the next school year. Close monitoring will be necessary to prevent some of the problems that have been encountered in the past. Comparing the new results with those reported this year would give a more comprehensive picture of the value of this approach.

Another facet that might be investigated would be the effect of parental help in completing the study guides. Using the guides only as homework assignments would entail a good deal of explanation of purpose in order to maintain a level of cooperation for an extended period. The effort, it seems, would be worthwhile. An important side effect of such an approach might be the start of new interest in the child's academic progress, and a better understanding of his/her problems.

In speaking to the three teachers who have thus far assisted in the experimental part of the program, the opinion was often voiced that the text publishers should make material such as this to accompany their textbooks. Included in the teacher's manuals are many excellent suggestions as to how to teach, and the lists of appropriate resource material are ample. All of this leaves the teacher with a storehouse of ideas that he/she must sort through, and search for, in order to prepare the units and lesson plans. A pilot study using such material as has been developed in this project might make learning more effective while reducing

the teachers' work load. Textbook publishers have within their work forces highly trained and knowledgable personnel who could prepare such study guides more technically perfect than those used in this research.

Limitations of this research

1. The original plan for this study included provision for one class to use the study guides to control for experimenter bias. Unfortunately, the plan was thwarted because nearly half of the students in the selected class discovered the pretest passage in the textbook and copied the answers down word for word, thus making the test results useless. A better explanation needs to be given both to the students as well as to the teachers regarding test security.

2. Pretest results were not compared with academic standings. Such monitoring would provide valuable information to share with each teacher at the outset of the school year. The cloze test has been shown to be a reliable indicator of reading comprehension (Bormuth, 1968, 1973), and comparing these results with previous information could aid in a better understanding of the individual student.

3. All testing should have been done under normal testing conditions. The fact that a potentially disruptive child did remain in the class and take the test with the Control$_2$ group, could well have affected the test results for the entire class.

Normal testing conditions also attempt to prevent cheating. On pretest results, cheating is somewhat easier to detect than on post test results. Scores that do not correlate with the student's past performance show up markedly. Post test scores that show abnormal gains could be attributed to either cheating or to actual gains. The uncertainty precludes any rational assessment of the teaching methods or conditions.

4. Within the treatment certain limitations are apparent. The study guides are far from technically perfect. Little consideration was given to sentence length or structure. The main objective was to restructure the reading material so that key words and ideas were highlighted. Sometimes this required definitions or explanations. At other times the key word or idea was to be filled in in the blank. Every study guide, of course, was used in connection with the pages assigned in the textbook. No guessing was encouraged. Having to read both the book and the study guide, then having to locate the answer in the book and transfer it to the study guide made for a multiple impression method of teaching (Kerfoot, 1973). The steps that Kerfoot outlined are:

1. Maximize the number of experiences.
2. Maximize the variety of settings.
3. Maximize the variety of responses.
4. Regress to previously taught words and elements together with experiences in new ones to develop a spiral approach to teaching the basic content of reading (Kerfoot, 1973)

5. Because of the method used for scoring (guided by the pupil's choices of words that made good sense in the content), the scores do not present an accurate guide for deciding the

frustrational, instructional, or independent levels of the text (Smith, et al, 1972). It cannot be assumed that the material is too easy for those who scored higher than 29, though a frustrational level is indicated for those not reaching a score of 22 correct answers out of 50 (Bormuth, 1968). The lenient grading criterion would tend to enhance the scores.

Discussion

Of significance is a comparison of the Gain/Loss columns in Table 1. Every score in the Experimental group made a gain as compared with the erratic gain/loss pattern in both the Control groups. Some of the larger gains and losses need explanation.

Subject S in Control$_2$ group scored as high as the gifted subject in the Experimental group and should have done at least as well on the post test. Between the combined scores of R and S the loss for the C_2 group was substantial. A known factor that could have affected the entire class performance was one serious discipline problem.

In discussing the results of the pre and post tests with the C_1 teacher, it was not clear whether all of the gains in the lower half of the class were true gains, since there was some potential present for cheating. As in all the classes, however, the low reading achievers were in the Title I program, and some of the gains could be attributable to that tutoring. These sizeable gains were not apparent in the C_2 group. The 15 word gain for subject F was understandable in that the parent was providing

tutoring at home.

The largest gain among the low comprehenders in the Experiment group was the 16 word gain made by subject F. This would lend support to the efficacy of the study guides, since the child's parent made sure that each one of the study guides was completed properly. Unlike the parent who was providing professional tutoring for the student in the C_1 group, this parent had no professional training, but could provide only such help as was needed to see each task through to completion.

Subject H appeared to be an extremely insecure and withdrawn child. He had great difficulty in understanding oral or written directions and did not work well independently. Coupled with his preference to work alone, the study guides initially were a source of frustration. As the training period progressed, however, his anxiety seemed to lessen. The study guides were more accurately completed, and he began taking an active part in the discussions that followed each lesson. The 15 word gain score reflects this confidence in his own reading comprehension.

The initial score made by subject M was a surprise because of his previously demonstrated ability. As for student H, the pretest offered a good deal of frustration which lessened after the first few study guides had been completed. By the end of tne training period he had gained the concentration needed to effect a valid score.

Subject J made a 14 word gain for at least two reasons. One, he was an excellent student, always doing what was required. Two,

the advanced group with which he worked most of the time, gave free rein to his competitive spirit. The study guides seemed to offer the kind of challenge he needed, since they were always completed promptly and properly. Subject P was also an excellent student and highly motivated, both good reasons for the 11 point increase in the post test.

The 12 word gain made by subject D should not have been a surprise. Even though he was always working at a frustrational level, never able to finish an assignment before the discussion and checking time, he worked seriously. When he worked with a buddy, he took the initiative. When he worked with a group, he was attentive. At times he would ask for assistance with his work. Keeping on task would seem to have effected this sizeable gain.

How much of the overall 143 point gain in the E group can be attributed to the study guides or to other factors is not clear, except for the fact that only the Experimental group used the study guides during the training period.

SUMMARY

The study guides appear to be a significant factor in this teaching/learning method. However, due to the length of time involved (nine weeks) and the fact that this program was only one phase of the daily activities, other factors may have influenced to some degree the overall gain in reading comprehension.

Within the program such variables as parental help, group activity, motivational strategies, and self-correcting of the guides

during discussion periods may also have been factors influencing the outcome. In commenting on good research design, Samuels (1977) asks, "Was it the cheese or the monosodium glutamate, or a combination of both that made the difference?" Any one or a combination of the variables that were a part of the study guide training might have acted as the catalysts to effect an improvement in content reading comprehension. It may be that the whole package was the answer to the apparent success of the project.

It would appear that study guides can successfully be used with third graders to increase their content reading comprehension. At the present time, only the resourcefulness of the classroom teacher can provide this type of text-based material to assist the student with one of the most important lessons he/she will ever learn in school -- how to study.

For teachers who might want to try this approach, but have misgivings for one reason or another may find encouragement in the following:

> "Humans will learn from instructive documents which are badly prepared. The main consideration is that all the needed information is included in some form.
>
> "How to keep the student working and teaching the student how he should study are the most practical approaches toward making written documents useful instructive tools" (Rothkopf, 1965).

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APPENDIX

Name _____ Date _____

SOCIAL STUDIES

"Let's go to the car," said Mr. Brooks. "It is time we _____ into San Francisco. We _____ many things to see _____ do in the city."

_____ walked back to the _____. In the car Mr. Brooks _____ at a map. He _____ at a road map _____ the city. He found _____ freeway from the airport _____ downtown San Francisco.

"Let's _____ to Union Square in _____ San Francisco," said Mother. "_____ can park the car _____ the underground garage. There _____ many ways to travel _____ San Francisco without the _____."

"How will we travel _____ the city without the _____?" asked Kathy.

"It will _____ easy," said Father. "We _____ ride the new subway. _____ can take buses. There _____ trolley cars too. Most _____ have taxicabs, buses, and _____. Remember, we have them _____ home in our city."

"_____ we ride all those _____?" asked Kathy.

"We will _____ out when we reach _____. We will find out _____ much money they cost," _____ Father. "Then we will _____ about the best ways _____ travel in San Francisco.

Mr. _____ told them about the _____ as they drove. "This _____ is a fast way _____

get downtown," said Father.

"_____ the freeway, it took _____ to go downtown. You _____ to drive along narrow _____. Narrow streets were built _____ there were so many _____.

"Many of the narrow _____ are one-way now. _____ the cars go in _____ same direction. That makes _____ on narrow streets a _____ faster. But we still _____ freeways."

(Teacher reads the directions to the students. Give NO help.)

Directions: Read the story as quickly as you can. Skip over the blanks. Then read the story again. This time fill in a word in the blank space to make the sentence complete. Try your best to find a word that will make sense in the sentence. Do the best you can to complete all the spaces.

Name _____ Date _____

The Big City (pp. 6-7)

The name of this city is (Sn Frncsc) _____
(p. 10, lines 3, 4)

Can you find at least 7 forms of transportation on these two pages? Draw mini (little) pictures of three.

On p. 13, paragraphs 3, 4, find 5 ways to travel in the city. (crs)_____ (trxcbs)_____ (sbwy)_____ (bss)_____ (trlly crs)_____. Another way to get around San Francisco is on p. 18, line 1. (cbl cr)_____.

Find a fast way to travel between cities on p. 12, line 1. (aplns)_____. Two kinds of sea-going transportation are on p. 26, paragraph 2. (shng shp)_____; (stmshp)_____. There is a big ship, and a little boat at the top of p. 29. Their names are on line 1: (cn Inn)_____ and (tg)_____.

Did you find a (trn)_____ on p 6? (Yes or No)_____

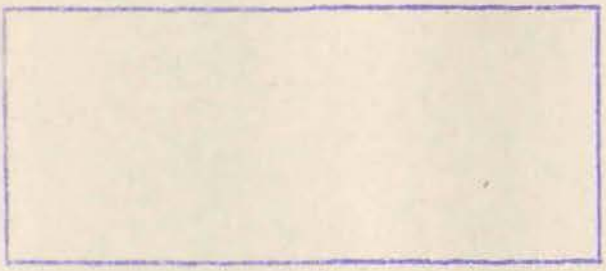
At the top of the map on p. 36 is the name of a bridge. The (Gldn Gt Brdg) _____ _____ _____ is at the (top, bottom) of the picture on p. 7.

How can you tell from pp 6-7 that San Francisco is a big city? Write your answer on the back

Draw one kind of tree that grows in San Francisco. (p6) What kind of climate do date palms need? (Look in the encyclopedia.) Report.

Name _____ Date _____

At the Airport pp. 8-9



The picture on p. 8 shows a (jt pln) _____ taking off. (Crl Brks) _____ _____ is on board that plane. He is going to (Thlnd) _____ to work for the (Pc Crps) _____. (Ask your parents about the Peace Corps. core Bring your answers back to share with the class.)

What will Carl be doing? _____

When will he return? _____ Where did Carl learn to be a teacher? _____

The plane will cross the (Pcfc cn) _____.

How else could Carl get to Thailand? _____

The photographs on pages 5 and 12 are taken from the air. They show San Francisco's (rprt) _____.

It is on the (Ocean side; Bay side) of San Francisco.
cross out one

On p. 9, Kathy is pointing to _____ with her right hand. San Francisco is on the _____ side of the Pacific. The (glb) _____ shows us that Thailand is thousands of (mls) _____ away (crss) _____ the Pacific (cn) _____.

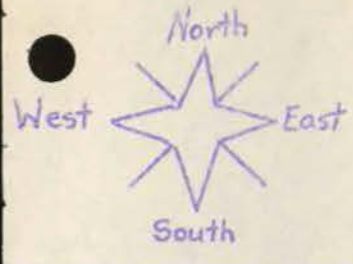
Why did Father say, "We are lucky"? _____

_____ Who felt lonely at the airport?

_____, _____, _____, _____.

What will make Carl seem close to his family? _____

Name _____ Date _____



A Long Way From Home p. 10

The Brooks family traveled by (cr) _____ to San Francisco. They went in which direction from West Bend? _____ Symbols on the map on page 10 show what they saw on their way. Draw the symbols in the spaces to the left. Corn fields and wheat fields show (frm) _____ lands. Cattle are on (rnchs) _____.

How many people were in the car? _____

The first big city they saw was (Chcg) _____. In the middle of the (wht flds) _____ they went through (mh) _____. Passing over the (Rck Mtns) _____ they went through (Slt Lk Ct) _____. The red line shows the _____.

To get to the airport in San Francisco, they had to cross (Sn Frncsc By) _____. The map on page 10 shows this body of water. A bay is _____ _____. (page 10, paragraph 4, lines 1, 2, 3) San Francisco Bay is part of the P_____ O_____.

The name of the San Francisco airport is _____. (see map on p. 11)

Would air miles be more or less than road miles from Chicago to San Francisco? _____ Why? _____ _____. About how many air miles is it from Chicago to San Francisco? _____ (You will need to use your ruler. The scale shows that 1 inch = 450 miles.)

corn fields

wheat fields

feed cattle (beef)

lakes

mountains

cactus (desert)

Name_____ Date_____

The Map Key p. 11

A key is usually used to open a (lk)_____.

The map on p. 11 has a key. This key will help you to read the (mp) _____. It uses symbols to stand for things.

The bridges are marked by

How many bridges do you see on the map?_____

How is the city of San Francisco shown?

Show your partner where to find:

San Francisco Bay:
the Golden Gate
the Pacific Ocean

Which way is north on the map? _____ Did you use the compass rose to tell you? _____.

Draw a compass rose on the west side of your paper. The bottom of your paper would be the _____ side.

If you drove from San Francisco to the airport, you would be driving _____.

How many miles does one inch equal on this map? _____

The area covered from east to west is about _____ miles.

The distance from north to south is about _____ miles.

What are the red lines on the map? _____

What two colors are used to show cities? _____ and _____.

What does blue on a map stand for? _____

Draw symbols for things in your classroom.

Name_____ Date_____

Travel in the City p. 13

What kind of a map did Mr. Brooks look at?_____

In which direction is the city of San Francisco from the airport? _____ What is the name of the road between the airport and the city? _____

Why did they decide to go to Union Square first? _____

_____.

Why did they NOT need the car in the city? _____

_____.

Where in Union Square is the garage located? _____

Why do you think the garage is underground? _____

_____

How many ways to travel do you see on this page? Name the ways you find: _____

_____ Which of the ways would you like to travel? _____

Why did Father say that they would wait and see which transportation they would use? _____

What body of water is on the east side of the city?

_____

About how far do you think it is from the airport to the city? _____ Did you use the scale to help you find the mileage? _____ The scale shows that 1 inch = 2 miles. How many miles is the line from A to B? A _____ B ____miles

Draw a line 10 miles long at the bottom of the page.

Name_____ Date_____

Problems in the City pp. 14-16

CIRCLE THE WORD YOU CHOOSE

(Page 14, paragraph 1) The Brooks family used the (street, freeway, avenue, bridge) to get downtown because it is fast.

(Paragraph 2) It used to take a long time before the freeway, because the streets were (wide, narrow, bumpy, rough). The picture on page 75 shows you what these streets look like. They are too narrow to carry a lot of (people trains, traffic, cable cars).

(Paragraph 3) One of the city's big (problems, ideas, streets, buildings) is how to move the traffic smoothly and quickly. Many narrow streets are now (one-way, closed off, two-way, widened). This helps traffic move, but we still need (bridges, freeways, streets, state roads).

(Paragraph 4) Most of the traffic problem happens in the (summer; afternoon; on weekends; when workers are going to and from their jobs).

(Page 15, line 3) Another help for the traffic problem is (traffic lights; bridges; policemen directing traffic; fast cars). How do you think people got across San Francisco Bay before the bridges were built? _____

(Paragraph 1) What are three of the ways the city has taken care of its traffic problems? b_____, f_____, and o_____.

(Paragraph 2) To build freeways and to widen streets, the city needs (a boss, diggers, land, subways). City planners must plan for other important uses for land. Land is needed for h_____, for b_____, and to grow f_____.

(Paragraphs 3, 4, and 5) One way of keeping cars out of the city is by building a (parking lot; subway; freeway; bridge).

In a tunnel underground, a subway does not have to stop for (anyone, traffic, people, passengers). Part of the subway tunnel goes (under the Bay; over land; on the surface; on the street). In this way, it connects San Francisco to (nearby towns and cities; far away towns and cities; the station; all points in San Francisco).

(Page 16, paragraph 3) Keeping cars out of the city helps the city to solve another problem. Taking cars off the city streets keeps down (taxes, time, costs, pollution). Fumes from traffic mix with (smog, fog, air, wind). Pollution also comes from the s_____ from f_____. (Fog, smog, air, wind) is not good for people to breathe.

(Paragraph 5) (Subways, airplanes, ships, cars) are also unable to take off and land during heavy fogs or smogs. They are (grounded; at sea; in the air; far away) until it is safe to take off.

The picture at the bottom of page 16, shows that fog can be a problem for s_____, too. Why? _____

_____

Ask six questions about the picture on page 15. You do not need to answer your own questions.

Who_____?

What_____?

When_____?

How_____?

Why_____?

Where_____?

Name_____ Date_____

Tourists in the City pp. 17-19

CIRCLE THE WORD OR WORDS YOU CHOOSE TO COMPLETE THE SENTENCE.

The Brooks family watched for signs and street names to help them get to downtown (Chicago, West Bend, San Francisco, Salt Lake City). They parked their car (on the street; at the hotel; at the subway station; in the underground parking garage).

The first place they went was (to the store; to the post office; to the restaurant; to see the cable cars). The downtown streets were very busy because (it was lunchtime; it was a holiday; people were just coming to work; people were going home from work).

Kathy got information about the city by (writing to a friend; writing to the Chamber of Commerce; asking her parents; asking her big brother, Carl). The Chamber of Commerce wants people to come to their city mainly (to see their parks; to drive over their bridges; to visit friends; to spend money). People spend money when they (stay in hotels or motels; eat in restaurants; shop in the stores; ride the city transportation).

Workers in the city earn their money from (taxes; the city; the government; money the visitors spend). Out of this money the city gets taxes to pay for new roads, repair bridges, keep the parks looking nice, and many other things the city needs.

A cable car is run by(a motor; an engine; steam; grips on a moving cable). What is the man that runs the cable car called? _____. What happens when the cable car comes to the end of the line? (top picture on page 18) _____

_____

What does the picture at the bottom of page 18 tell you? _____

_____

Find out something about San Francisco's cable cars to share with the class.

Name _____ Date _____

SOCIAL STUDIES - A Beautiful City Park pp. 20-21

On page 20 there are three pictures from San Francisco's _____(Gn Ge Pk). In a busy city it is nice to find such a beautiful _____(pk). It has _____(gs), _____(ts), and _____(fs). It has not just one _____(le), but many _____(ls) with small _____ (bs) on them. One could go _____(hk) riding, too, on its paths.

In the _____(am) there are _____(fh) from far-off _____(os). _____(Vs) enjoy watching the funny tricks of the two _____(ds). In the lovely Japanese Tea Garden, the Brooks family drank _____(ta) and ate _____ _____(re os). The soft and quiet beauty of the park is very different from the _____(se) and _____(sl) of the busy _____(cy).

The lakes and streams of the park are not _____(nl). Before the park was developed, there were only _____(sd ds). All the plants and _____(ts) have been put there by _____(p They have _____(wd) hard to make the park a _____(b place. Which picture shows the sand dunes? _____

Uncle John's name was really _____. He came to America from _____(Gd). Uncle John did a great deal to make the park attractive. He planted _____(ts) and _____(ps) from all over the _____(wd).

The little blue picture next to Uncle John shows the _____ that Peter and Kathy enjoyed. The little green picture at the bottom of page 20 shows a conservatory. What do you think is in the building? _____. Look in the C Encyclopedia or in the dictionary to find the answer.

Name_____ Date _____

SOCIAL STUDIES - People Who Built the City pp. 22-23

One of the places the Brooks family visited was _____(Cn). The map on page 36 shows that Chinatown is at the _____(nh) of the downtown area. The picture at the top of page 23 shows a shopping _____ (st). You can see what some of their _____(bs look like. (Do you wonder why their buildings have so many roofs shaped the way they are? Who could you ask to find out?)_____

The _____(Ce) people first came to _____(Ca) to build a _____(rd). Building a railroad was hard and _____(ds) work. Now the Chinese people do many kinds of _____(wk). The first paragraph names four kinds of work they do: _____, _____, _____, and _____. What kinds of work would people do in the Chinese _____(rt) where the Brooks family had dinner? Make a list on the back of your paper. What kinds of jobs would the Chinese people do in the grocery _____(se) they visited? List these jobs on the back of your paper. What does the third paragraph on page 22 say about the foods that the Chinese use? _____

They explored Chinese shops. Your dictionary will tell you what the word explore means. Write the definition here: _____

_____

Where were the things sold in these shops made? _____

Peter bought a _____(pr dn). At what time of the year do the _____(Ce) people have a dragon parade? At _____(Ce Nw Yr) What do the people believe about the dragon? _____

Why did the Chinese people all live close together when they first came to America? _____

Name_____ Date _____

SOCIAL STUDIES - The People Who Built the City pp. 24-25

The first people living in the area where _____(Sn Fo) was built were the _____(Is). The first people to come from other _____(ls) were the _____(es) from Spain. They were looking for _____(nw ls) and _____(ts). Who was the first man to sail from Spain across the Sea of Darkness? _____ Other explorers who came after him were also looking for _____(ld) and _____(ts). Many of them made their homes in _____(Mo).

From Mexico many _____(cn) and _____(ss) came to the _____(Sn Fo) area. Here they built churches and _____(ms). They taught the _____(Is) how to build _____(hs) like those in Spain. What else did the Indians learn at the mission? _____ and _____.

Do you remember where you have seen the picture of the Spanish Mission before? Look on page 6. Do you also see part of Chinatown and a little of the Japanese Tea Garden behind the Conservatory? Where are the dolphins that Kathy and Peter saw at The Golden Gate Park? All these, and more, are a part of San Francisco's _____(hy). Where do you think San Francisco got its name? _____

For many years _____(Sn) owned San Francisco and the _____(ld) that is now the state of _____(Ca). Then it became part of _____(Mo). On the back of this paper sketch a map like the one on page 155. Label North and South America, Mexico, the Pacific Ocean and the Atlantic Ocean.

We can thank the _____(Sh) people for bringing with them horses, cattle, pigs, chickens, grapes, olives, _____(os) and _____(ls). We grow these in Florida, too!

Name_____ Date_____

SOCIAL STUDIES - The People Who Built the City pp. 26--27

William Leidesdorff was a _____ sea captain. He was born in St. Croix in the Virgin Islands. (These Islands are further out in the Caribbean Sea than San Salvador Island where _____(Cs) first landed in 1492.) He worked with two brothers in the cotton business in New Orleans. He became quite wealthy, and came to _____ (Sn Fo) in 1841. That's about 140 years ago. There were only about 800 people living there then. He built a _____ (se) and brought in _____(gs) with his own _____(sg sp). He bought the first _____(sp) that came into the _____(By). He also started the _____(ft) hotel in town. On the back of this peper draw the way San Francisco looked when Mr. Leidesdorff lived there.

Mr. Leidesdorff took good care of his own business. He also helped take care of the city's _____(bs). He was a member of the group that _____(gd) San Francisco. He did another very important service for the United States. Find the answer in the second column on page 26. _____

_____.

San Francisco grew into a large city very quickly because of the _____(Gd Rh). They came from all over the world looking for _____(gd). The book mentions three occupations (kinds of work) that the Italians did when they came over from _____(Iy). They are _____, _____, and _____. Amadeo Giannini started working when he was _____. He worked for a food wholesaler. (We buy food at a retail store.) Mr. Giannini became a _____(br). He helper poor people start a business by _____(lg) them _____(my). He opened many _____(bs)

His banks were the _____(lt) in the United States.

Hard working people made San Francisco _____(gw).

In the space below draw your picture of the way San Francisco looked when Mr. Leidesdorff lived there. The picture is in your book.

Name_____ Date_____

SOCIAL STUDIES - Growing Cities pp. 28-29

San Francisco has grown out as far as it can go. It now has to grow _____ to make more _____(ps) for its _____(ts) of people to live and to work. It is also growing _____. Union Square Garage and the _____(ts) for subway trains are examples of how a _____(cy) grows.

One reason so many people have come to San Francisco is its fine _____(hr). Many people are needed to do the _____(js) created by the _____(ss) and _____(ts) they bring from other places. The harbor is alive with _____(tc). Miles of _____(ps) line the waterfront where ships _____. The picture on page 29 and the map on page 36 show how the piers are built on the _____(wt). Do you see a pier on page 28? _____.

Ships have different names to show what they are used for. A _____(fr) carries goods or _____(co). Freighters carry goods from the _____(U.S.) to other parts of the _____(wd). Freighters also bring goods to the United States from _____ _____(fn cs). Ocean liners carry _____(pe) as well as _____(co). Ocean liners need to be _____(gd) into the piers by little _____(ts). These _____ _____ are the busiest boats in the harbor. Sometimes it takes _____(sl) tugs to bring in one ocean liner.

How is the picture at the top of page 28 different from the picture on page 16? _____.

At the top of page 47 you will see fishing boats tied up at the _____(dk). What do you think the people in the picture are doing?

_____.

Name _____ Date _____

SOCIAL STUDIES - Growing Cities pp. 30-31

In our last lesson we learned that San Francisco is a growing city because of its fine _ _ _ _ _ _. Many different kinds of _ _ _ _ _ come into the harbor. The ships carry _ _ _ _ _ _ and _ _ _ _ _ into the _ _ _ _ of San Francisco from all over the _ _ _ _ _.

The six paragraphs on page 30 tell us more about San Francisco as a _ _ _ _ _ _

The sixth paragraph sums up San Francisco as a _____ _____ _____. It has a _____ for ships. It has _____ for planes. _____ travel on the railways, and _____ and buses travel on the _____. These means of _____ helped San Francisco grow into a big _____.

Boston and New York City are among many seaports that have grown into large cities because of their fine _____. New Orleans grew into a large city for two reasons. It is located on the Gulf of Mexico at the mouth of the Mississippi _____. River boats take _____ up and down the river. Ocean-going _____ load and unload their _____ at the _____ of New Orleans. (If you need help on this last work, you will find it at the end of the Glossary at the back of your book.)

The two pictures on page 31 each show a city that has grown large for other reasons. Pittsburgh grew up where _____. Chicago is a very large city on _____.

Another reason that would help a city to grow is because of nearby _____ _____ such as _____, _____, and _____. These are necessary for a factory to have. Factories need _____ to run them. When goods are produced, they must be sent to market. Natural resources attract _____. People need goods and services. These are brought by different means of _____. The finished products must be moved. Roads must be built. People need _____ in which to live. What natural resource besides its harbor did San Francisco have? _____. The people who came to find gold were very helpful in making San Francisco grow into a big city.

Name _____ Date _____

SOCIAL STUDIES - Many People Live and Work in Big Cities pp. 32-33

Many thousands of people live and work in a big _ _ _ _. San Francisco is a big _ _ _ _, so you know that there are _ _ _ _ _ _ _ _ _ of people living and working there. As in most cities the _ _ _ _ _ _ _ _ area is where the city first started to _ _ _ _. Why would there be NEW buildings in the downtown area? _____ _____.

In the third paragraph on page 32, five different kinds of buildings are listed. They are: _ _ _ _ _ _ _ _ _ _; _ _ _ _ _ _ buildings; _ _ _ _ _ _; _ _ _ _ _ _; and big _ _ _ _ _ _. Some of the newer buildings are very tall. They are called _ _ _ _ _ _ _ _ _ _ _ _. Why do you think this is a good name for them? _____ _____. With so many buildings so close together, there is not much room for _ _ _ _ _ and _ _ _ _ _ _ _.

What kind of a building do you see at the top of page 33? It is a _ _ _ _ _ _ _ _ _ _. You can tell because there is a _ _ _ _ _ _ _ _ _ coming out of the front door. The building at the bottom of the same page with the two tall towers is a _ _ _ _ _ _. You can tell because of the _ _ _ _ _ _ _ at the tops of the steeples. The beautiful building with the tall double columns is a library. Does Jacksonville have a large library downtown? _____ If so, what is its name? _____. (If you don't know, you could look in the yellow pages under Libraries and find out!)

What would happen if there were no office buildings, no stores, no banks, and no other places for people to work in? _____ _____. What do you see in the background of the picture at the bottom of page 32? The _ _ _ _ _ _ _ _ _ _ _

Name _____ Date _____

SOCIAL STUDIES - The Changing City pp. 36-41

At the very bottom of the map on page 36 you see the _ _ _ _ _ _ _ _ area of San Francisco. Near the north on the Bay side of the city is the _ _ _ _ _ _ _ _ area. People must travel _ _ _ to get from the suburban area to the _ _ _ _ _ _ _ _ area of San Francisco.

Other people live in the _ _ _ _ _ _ _ _ _ _ _ _ areas around the downtown area. Some of these people live _ _ _ _ _ to the _ _ _ _ _ _ _ _ _ _ Park. The yellow area along San Francisco Bay is the _ _ _ _ _ _ _ _ _ _ _ section. Fisherman's wharf is at the _ _ _ _ _ end of the _ _ _ _ _ _ _ _ _ _. (A body of land surrounded on three sides by water.) Why would the industrial area be located where it is?

At the bottom of page 37 are some big _ _ _ _ _ _ _ _ _ houses. The people at the top of page 38 are enjoying _ _ _ _ _ _ _ at a neighborhood park. The picture at the bottom of page 39 shows something that people need. _____ This makes it easier for people to live in the _ _ _ _ _ _ _ because they do not have to travel so _ _ _.

People like to live in the suburbs because there is more _ _ _ _. Other people like living in the urban area of the city because they are _ _ _ _ _ to the kinds of things they like to do. They may also choose to live in the city because it is close to their _ _ _ _. _ _ _ _ _ _ _ for their children and places to shop for _ _ _ _ and _ _ _ _ _ _ _ _ are also important things to think about. People like to choose their place to _ _ _ _.

City planners must plan the different sections so that the city will _ _ _ _. If all the businesses move to the _ _ _ _ _ _ _. there will be no _ _ _ money to build _ _ _ _ _ _ _ and _ _ _ _ _.

Name _____ Date _____

SOCIAL STUDIES - City Government p. 42

The city is a better place to live when _ _ _ _ _ _ _ _ work together. YOU are a citizen. Have you ever

collected the trash? _____ Sanitation Department

directed the traffic? _____ _____

driven the hook and ladder? _____ _____

fixed a broken water main? _____ _____

raked leaves in the city park? _____ _____

run the Bookmobile? _____ _____

answered an emergency call for an ambulance? _____ _____

repaved a street? _____ _____

taught school? _____ _____

stacked books in the public library? _____ _____

caught a burglar? _____ _____

If you answered NO to each question, you are right! Then how do you and your family help make Jacksonville a better place? We, the people, (the citizens) elect a _ _ _ _ _ once every _ _ _ _ years. He is the head of the city _ _ _ _ _ _ _ _ _ _ _. The job of running a big _ _ _ _ is more than one person can do. So the mayor _ _ _ _ _ _ _ some people to work with him. Others are _ _ _ _ _ _ _ by the people.

Match these departments with one kind of work they do. Write each one on the right line above. The first one has been done for you.

Sanitation Department Public Schools Fire Dept. Police Dept.
City Hospital Public Libraries Water and Sewer Dept.
Streets and Highways Parks and Recreation

All these workers must be _ _ _ _ for their work. Police cars, steam rollers, trucks, and buildings cost _ _ _ _ _ _. The city gets its money from the _ _ _ _ _ that citizens pay. Everybody that works pays _ _ _ _ _ to the city.

Workers Earn Money in the City p. 43

Answer True or False to each of the following statements:

_____ Workers in San Francisco do much the same kinds of work as people in West Bend.

_____ There are sales people in West Bend, but no taxi drivers.

_____ San Francisco has only buses and subways for public transportation, so they won't have to pay so many workers.

_____ Some factory workers in San Francisco can tuna fish. This would probably not be true of workers in West Bend.

_____ There are no dock workers in West Bend.

_____ People work in grocery stores, offices and banks in any big city.

_____ All big cities have some kind of system to communicate with the citizens. Radio is the best means of communication.

_____ Only newspaper reporters work for the city newspaper.

_____ There are many kinds of workers at the telephone company.

_____ Not all big cities have hospitals and restaurants.

Your book says that a big city has nearly a _ _ _ _ _ _ _ people. Most of them have jobs so they can _ _ _ _ their living. Some of the _ _ _ _ _ they earn is used for things they need. Everyone needs _ _ _ _, _ _ _ _ _ _ _ _, and a place to _ _ _ _. Some of the money is _ _ _ _ _ in a bank, and some goes for fun things. All workers pay _ _ _ _ _. City workers are paid out of _ _ _ money. Do city workers pay taxes? _____

Name_____ Date _____

SOCIAL STUDIES - A Last Look at San Francisco pp. 44-45

Going up in a glass _ _ _ _ _ _ _ _ must have been an exciting trip for the _ _ _ _ _ _ family. Looking north from the _ _ _ _ _ atop _ _ _ _ _ _ _ they could see _ _ _ _ _ _ _ _

Name _____ Date _____

SOCIAL STUDIES - GEOGRAPHY TEST

1. Part of the sea that extends into the land is called

   A. a peninsula B. a bay C. an ocean

2. A place where many people live and work together is

   A. an apartment B. an airport C. a city

3. The land along the edge of a sea or an ocean is called

   A. a harbor B. a coast C. a seashore

4. The largest land areas on the earth are called

   A. continents B. mountains C. deserts

5. We live on a planet called

   A. America B. The United States C. Earth

6. Where the sun rises is the

   A. east B. west C. north

7. The model of the earth shown on a round ball is a

   A. map B. chart C. globe

8. A shelter for ships and boats is

   A. a bay B. a harbor C. an island

9. The symbols that explain what is on a map is called

   A. a scale B. a globe C. a map key

10. A. raised part of the land, higher than a hill is

    A. a mountain B. a continent C. a plain

11. Earth's largest bodies of water are called

    A. rivers B. lakes C. oceans

12. Land nearly surrounded by water is called

A. a peninsula B. an island C. a harbor

13. A broad stretch of mostly level land is called

A. a forest B. a plain C. a continent

14. A city with a good harbor is called

A. a port B. a transportation center C. a communi

15. A large stream of water flowing through the land is

A. an ocean B. a bay C. a river

16. Where many ways to carry passengers and freight meet is

A. an airport B. a railroad station

C. a transportation center

17. Where the sun sets is

A. the east B. the south C. the west

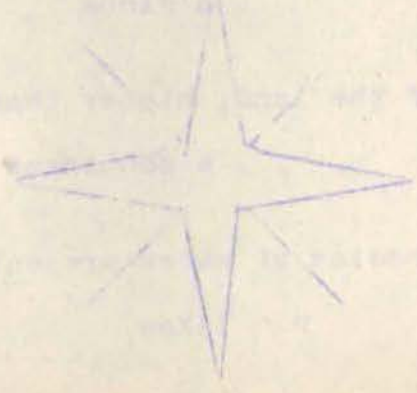
18. San Francisco has water on

A. one side B. two sides C. three sides

19. A famous bridge in San Francisco is called _____

_____

20. Label the directions north, south, east and west on this direction finder:



Name_____ Date_____

SOCIAL STUDIES - How A City Gets Its Food pp. 50-51 Part I

The picture on page 50 shows a family of four at the dinner table. Everyone looks happy and well-fed. Where does the food they eat come from? Before Mother puts it on the pantry s_____ and in the r_____, she must make a trip to the g_____ store. The store doesn't have v_____ growing outside their back door. They don't have f_____ trees, or f_____ yards to get chickens or e_____. Have you ever seen a c_____ being milked behind the store? Of course, the answer is ____!

The picture shows a truck waiting to put on the next b_____ of v_____. The workers are on a vegetable f_____.

Another picture shows a man looking through a m_____ s_____. He is an inspector in a cannery. He works for the g_____. The government makes sure that the food we e____ is good and s_____ for us.

At the g_____ store you have seen the stock boys open boxes and boxes of things they will put on the supermarket shelves. Who put those cans, boxes, and packages into the cartons? That happened at the canneries and f_____. Where will all those cartons be stored until someone buys them? Some place is needed to collect and store the many kinds of food and grocery items. That is where the w_____h_____ comes in.

The w_____ m_____, which you will be first reading about, handles f_____ and v_____. These are brought in daily. Grocery stores get their PRODUCE from the w_____ m_____. Look up the noun produce in the dictionary and write the definition: _____

_____

Name_____ Date_____

SOCIAL STUDIES - The Wholesale Market pp. 50--51 Part II

A warehouse is a large b_____ where food from f_____ is stored and sold. The picture at the top of p. 51 will give you an idea of how the wholesaler displays the p_____. This is a name we give to f_____ and v_____. Food is bought (or purchased) at the w_____ m_____ by s_____ and r_____.

Some large markets buy their food directly from the f_____. Large s_____ m_____ have their own warehouses in which to store the produce. This makes it easier for the supermarkets to have e_____ food to supply each of their s_____. They don't have to make daily trips for fresh p_____ from the w_____ m_____.

Stores not big enough to have their own warehouses and places that serve food to the public do need to make daily trips to the wholesale market. They need fresh f_____ and v_____ to prepare the meals for their c_____.

The busiest time at the wholesale market is e_____ in the m_____. Boxes of fresh l_____, of c_____, t_____, or c_____ are moved from the trucks and trains that brought them by f_____ tractors.

Some of the produce is set up for d_____ where b_____ can look them over before buying them. Some produce must be moved into c_____. Bananas come g_____ from the warm countries that grew them. They have to be ripened in a very special way. Some of the f_____ are busy loading produce onto trucks that will deliver them to stores, restaurants, and hotels in the c_____.

Name_____ Date _____

SOCIAL STUDIES - A Buyer's Day at the Wholesale Market pp. 52-53

The wholesale market sells f_____ and v_____. The opposite of selling is b_____. Buyers come from stores, restaurants, h_____, and hotels. How many meals are served in these places everyday? _____. Why does the buyer sometimes go to several different wholesalers before buying what he needs? _____

The two important things the buyer must think about are (1) _____ _____ and (2) _____ _____. (Find the answers in the second column on page 52.)

One problem the wholesaler has is very much like one the buyer has. Fresh fruits and vegetables s_____ easily. No one wants to buy spoiled p_____. Fruits and vegetables must be handled with c_____. They must be kept at just the right t_____. They must also be s_____ as quickly as possible.

Another problem the wholesaler has is also very much like the buyer's. His p_____ must not be so high that buyers will go to another wholesaler to buy his produce. He must also see that he makes enough p_____ so that he will stay in business. He must sell his produce for more than he p_____ for it. Profit is the money a business has left after all the bills are paid. A businessman pays for the goods he sells in his store. He gets money when someone buys his goods. Then he must pay the workers, and the light and telephone bills. There are many more bills that the store owner must pay. Some of the money must go for t_____. The money he has left over after all the bills are paid is his p_____.

Name_____ Date _____

SOCIAL STUDIES

Foods from all Parts of the World pp. 54-57

The wholesale market buys fruits and vegetables from all parts of the _____. Chile is a country in South America. From there we get special _____. The fruit you see at the top of page 54. _____, comes from Central America. Looking at the map on page 155, you can see that Chile would be _____ of Central America. Mexico is _____ of Central America. From Mexico and Hawaii we get papayas. Where did the papayas on page 53 come from? _____. The peppers on page 53 come from _____. At the top of page 51 the picture shows that _____, too, come from from California.

Our own Pacific Coast area has beautiful green _____. There millions of _____ worth of produce are grown. Some of the ways that fruits and vegetables are processed are by _____ in the hot sunshine, or being canned or _____. Which of the vegetables on page 54 (paragraph 2) do you think can only be sold as a fresh vegetable? _____.

Many oranges are produced each year by both _____ and _____. From the orange groves, the fruit goes to packing houses to be sorted. Refrigerated _____ and railroad cars take them to _____. Some of the oranges come to the consumer as juice. Sometimes it is fresh orange juice. Sometimes it is _____. Many of the vegetables packed at the frozen food _____ must be partly cooked before being frozen. Which picture on page 55 shows _____ being quick-cooked? _____.

On pages 56 and 57 there are seven pictures that tell a story of how tomatoes are handled before they come to the grocery store.

Migrant workers are very important to the large farms, orchards, and vineyards. Farms that grow vegetables are often called truck farms. _____ grow in orchards, and _____ grow in vineyards. (You may need to look up the words orchard and vineyard in the dictionary to help you with your answer.) If a migrant worker picked 10 boxes of tomatoes in an hour, how many would he pick in 8 hours? _____ That's a lot of tomatoes!

Picture 1 shows _____

Picture 2 shows _____

Picture 3 shows _____

What is all orangey-red on the ground? _____

At the bottom of page 56 the picture shows _____ _____. The belt at the top of the picture is carrying boxes into the _____ _____.

What are the two girls doing at the top of page 57? _____ _____.

How will the fresh tomatoes be sent to market? _____ _____ Which picture answers this question? _____ _____.

The picture at the bottom of page 57 shows a _____ that picks tomatoes. What will these tomatoes be used for? _____. Why would a tomato farmer use a machine to pick his tomatoes? _____ and _____.

Name_____ Date_____

SOCIAL STUDIES

Foods from All Parts of the World pp. 58-61

The glossary tells us that a valley is _____

_____. On the four pages assigned, you will find five kinds of vegetables mentioned. They are _____ and _____. Pages 58 and 59 tell mostly about _____. The picture at the bottom right corner of page 59 shows boxes of _____ _____. The boxes show that the lettuce is grown in _____.The pictures on page 58 show lettuce being prepared for market. How is this different from the way tomatoes are prepared? _____

What are the men in the picture at the top right corner of page 58 doing? _____. What do you see on the truck tires on page 58? _____. What is the name brand of the lettuce on the forklift tractor? _____ The picture at the bottom left of page 59 shows boxes of lettuce coming out of the _____. They will be taken to wholesale markets in different cities by r_____c_____.

Carrots grow in the _____. Carrots are prepared for market like tomatoes because they are taken first to a _____ _____. In the packing shed they are first _____. Then their _____ are cut off. Before going to the wholesale markets or warehouses, they are _____. Not all carrots are sold fresh. Some are _____ or _____.

Which vegetables are being processed on page 61? _____ and _____. Look at cans of corn and beans you might have at home to see where they were packed. Make a list of other fruits and vegetables showing where they were packaged. Share in class.

Name _____ Date _____

SOCIAL STUDIES

By Train, Truck, Ship, and Plane pp. 62-64

A train travels on _____. A truck travels on a _____. Ships sail on the _____, while airplanes fly through the _____. Which of these forms of transportation bring food supplies to Jacksonville? _____ Would you say that our city is a transportation center like San Francisco? _____

How would coffee beans grown in Brazil come to the Maxwell House Coffee plant in downtown Jacksonville? _____ How would fresh pineapples from Hawaii come to us? _____ The label on a can of Dole Pineapple says "Product of Thailand." How would cases of that brand of pineapple probably have come to us? _____. Florida has many dairy farms. How would milk from Miami or Lakeland come to Jacksonville? Before you answer, remember that milk spoils quickly in the heat. _____ _____. Florida grows many different kinds of fruits and vegetables. In the central region of Florida, orange groves cover the rolling hills. Haines City, not very far from us, is called the "Potato Capital of the World." Cabbages, beans, carrots and tomatoes are some of the many vegetables grown on Florida's truck farms. How do these fruits and vegetables get to the Jacksonville supermarkets? _____

At the bottom of page 62, you see _____ being loaded into a _____ by a forklift truck. Refrigerator cars from the train on page 63 will be dropped off in the _____ _____ of many big cities. Bananas are being unloaded by a moving _____ from a ship that came from _____.

How will they get to inland cities? _____

Fresh fruits and flowers from far away must travel quickly. These come by _____p_____. Why do you think the containers for these cargo planes are called igloos? _____ _____ _____. Why are these containers shaped the way they are? _____ Look again at the pictures on these three pages. Would you say that the trucks, trains, ships, planes, and the many kinds of equipment shown, cost a lot of or a little bit of money? _____ Do you think the men get paid for doing their jobs? _____ All of this cost must be added to the price the customer must pay.

The BIG IDEA is that _____ plays a very important part in the growing of food and the cost of it when your _____ buys it at the store.

Name _____ Date _____

SOCIAL STUDIES TEST - CHAPTER 2

Circle the letter for the correct answer.

1. The busiest time at the wholesale market is

   a) early morning b) noon c) evening

2. Two things the buyer must think about are

   a) fruits and vegetables
   b) price and quality
   c) warehouses and wholesale markets

3. Handling the produce quickly and setting it up for each day's sales are problems for the

   a) buyer b) farmer c) wholesale market

4. Bananas and tomatoes are picked green

   a) because they taste better
   b) so they will not be damaged in shipment
   c) because the growers will be able to pick more

5. At the wholesale market forklift trucks are busy

   a) picking up and moving stacked boxes of produce
   b) delivering produce to stores and restaurants
   c) getting papayas ready for shipment to Hawaii

6. Meats and frozen foods must be shipped to markets everywhere

   a) in airplane igloos
   b) in chillers
   c) in refrigerated transportation

7. The inspectors that check food in the wholesale markets and food processing plants

   a) get paid by the government
   b) get paid by the wholesale market or plant
   c) don't get paid

8. The money any business has left over after all the bills are paid is called the

   a) produce b) price c) profit

9. Tomatoes not picked by hand are

a) too squashed to use
b) made into ketchup or soup
c) left in the field

10. The final user of a product is called a

a) buyer b) customer c) retailer d) wholesaler

11. Truck farmers pick which crop only by hand?

a) tomatoes b) carrots c) lettuce

12. A cannery is where fruits and vegetables are

a) processed for the wholesale market
b) processed in cans
c) quick-frozen

13. A frozen foods plant is where fruits and vegetables are

a) put into chillers
b) stored in igloos
c) partly cooked and packed in containers to be kept at temperatures below 32°F

14. A packing house is where fruits and vegetables are

a) packed into cans
b) washed, sorted and prepared for market
c) packed into trucks at the field for delivery to the market

15. Cost of the foods we buy at the store includes the

a) wholesale market's profit
b) farmer's profit
c) grocery store's profit
d) all of the above

16. Cost of the trucks, planes, ships and trains that bring our food from far away

a) increases the price we pay for the food
b) decreases the price we pay for the food
c) affects the price we pay for the food

Name _____ Date _____

SOCIAL STUDIES FILL-IN TEST

People everywhere must have safe water to drink. They need water to _____ themselves and their houses _____. Water is needed to _____ streets clean and to _____ out fires. Water is _____ to help things grow -- _____ and trees and gardens -- _____ that help to make _____ town beautiful.

Towns and _____ must find ways to _____ enough water for all _____ people who live there. _____ must be found to _____ enough water to last _____ long dry spells. That _____, there must be enough _____ even when there is _____ rain month after month.

West Bend _____ its water from two _____. The water is stored _____ two big reservoirs. The _____ are man-made lakes _____ were built especially to _____ water.

As the water _____ from the river into _____ reservoir, it is not _____ enough to be used. _____ it must be made _____ to drink before it _____ into the water pipes.

_____ water is pumped from _____ reservoir to a treating _____ where it is made _____ and safe to drink. _____ the treating plant it _____ pumped into the main _____ of West Bend. Now _____ water is on its _____ to buildings and homes _____ the city. It has _____ many miles from the _____ and many things have _____ done to it so _____

the people of West Bend _____ have good drinking water,

_____ plenty of it.

A _____ months from now Forest Hills _____

also have fresh clean _____ to drink. It will _____

pumped into the mains _____ from the treating plant _____

the new suburb. Through _____ big mains it will _____

into pipes leading into _____ and buildings in Forest Hills.